

**ABSTRACT OF THE DISCLOSURE**

A method is disclosed for operating a wireless communications system, such as a DS-CDMA communications system, by transmitting a waveform that includes a plurality of repeating frames each having x header training base symbols in a header training symbol field (TH) and y tail training base symbols in a tail training symbol field (TT). The frame is received and functions as one of a plurality of different types of frames depending on the content of at least TT. In the preferred embodiment the frame functions as one of a normal traffic frame, a termination frame, or a legacy frame providing backwards compatibility with another waveform. A given one of the frames includes four equal-size data fields separated by three equal-sized control fields, the header training symbol field (TH) and the tail training symbol field (TT).